

Claims

1. A nonbacterial prostatitis animal model exhibiting a prostate tissue damage characteristically observed in human chronic nonbacterial prostatitis and a lower urinary tract disorder characteristically observed in human chronic nonbacterial prostatitis,

the animal model being a nonhuman animal, and being prepared by injecting hydrochloric acid beneath the prostatic capsule.

2. The nonbacterial prostatitis animal model according to claim 1 having an increased ratio of bladder weight to body weight compared with a normal nonhuman animal.

3. The nonbacterial prostatitis animal model according to claim 1, wherein the lower urinary tract disorder is a urine storage disorder posing at least one symptom selected from the group consisting of pollakiuria, urinary incontinence, and reduced effective bladder capacity.

4. The nonbacterial prostatitis animal model according to claim 1, wherein the animal model is a nonhuman animal, and prepared by injecting hydrochloric acid beneath the capsule of a dorsolateral lobe.

5. The nonbacterial prostatitis animal model according to claim 1, wherein the animal model is a nonhuman animal reared for about 4 days to about 1 week after injection of hydrochloric acid beneath the prostatic capsule.

6. The nonbacterial prostatitis animal model according to claim 1, wherein the nonhuman animal is a rat.

7. A method for preparing the nonbacterial prostatitis animal model recited in claim 1 comprising the steps of:

injecting hydrochloric acid beneath the prostatic capsule of a nonhuman animal, and

rearing the nonhuman animal to develop prostatitis.

8. The method for preparing the nonbacterial prostatitis animal model according to claim 7, wherein hydrochloric acid is injected beneath the prostatic capsule of a

dorsolateral lobe.

9. The method for preparing the nonbacterial prostatitis animal model according to claim 7 comprising the steps of:

5 injecting hydrochloric acid beneath the prostatic capsule, and

rearing the nonhuman animal for 4 days to 1 week.

10 10. The method for preparing the nonbacterial prostatitis animal model according to claim 7, wherein the nonhuman animal is a rat.

11. A method for screening for a substance for treating human chronic nonbacterial prostatitis comprising the steps of:

15 administering a test substance to the nonbacterial prostatitis animal model recited in any one of claims 1 to 6, and examining the effect of the test substance for ameliorating at least one disorder selected from the group consisting of a prostate tissue damage and a lower urinary tract disorder of the nonbacterial prostatitis animal model.

20 12. The method for screening for a substance for treating human chronic nonbacterial prostatitis according to claim 11, wherein the lower urinary tract disorder is a urine storage disorder posing at least one symptom selected from the group consisting of pollakiuria, urinary incontinence, and reduced effective bladder capacity.

25 13. A method for screening for a substance for preventing human chronic nonbacterial prostatitis comprising the steps of:

30 administering a test substance to a preparatory nonbacterial prostatitis animal model prepared by injecting hydrochloric acid beneath the prostatic capsule, which has not yet developed prostatitis, and

35 examining the effect of the test substance for inhibiting the development of at least one disorder selected from the group consisting of a prostate tissue damage and a lower urinary tract disorder of the preparatory nonbacterial

prostatitis animal model.

14. The method for screening for a substance for preventing human chronic nonbacterial prostatitis according to claim 13, wherein the preparatory nonbacterial prostatitis animal  
5 model is a nonhuman animal, and prepared by injecting hydrochloric acid beneath the prostatic capsule of the nonhuman animal and rearing the nonhuman animal for less than 4 days, which has not yet developed prostatitis.

15. The method for screening for a substance for preventing human chronic nonbacterial prostatitis according to claim 14, wherein the nonhuman animal is a rat.

16. A method for evaluating the efficacy of a drug for ameliorating human nonbacterial prostatitis, the method comprising the steps of:

15 administering a test drug whose efficacy is to be evaluated to the nonbacterial prostatitis animal model recited in any one of claims 1 to 6, and

examining the effect of the test drug for ameliorating at least one disorder selected from the group consisting of a prostate tissue damage and a lower urinary tract disorder of the  
20 nonbacterial prostatitis animal model.

17. The method for evaluating the efficacy of a drug for ameliorating human nonbacterial prostatitis according to claim 16, wherein the lower urinary tract disorder is a urine  
25 storage disorder posing at least one symptom selected from the group consisting of pollakiuria, urinary incontinence, and reduced effective bladder capacity.

18. A method for evaluating the efficacy of a drug for preventing human nonbacterial prostatitis, the method comprising  
30 the steps of:

administering a test drug whose efficacy is to be evaluated to a preparatory nonbacterial prostatitis animal model produced by injecting hydrochloric acid beneath the prostatic capsule, which has not yet developed prostatitis, and

35 examining the effect of the test drug for inhibiting

the development of at least one disorder selected from group consisting of a prostate tissue damage and a lower urinary tract disorder of the preparatory nonbacterial prostatitis animal model.

19. A method for evaluating the efficacy of a drug for  
5 preventing human nonbacterial prostatitis according to Claim 18, wherein the preparatory nonbacterial prostatitis animal model is a nonhuman animal, and prepared by injecting hydrochloric acid beneath the prostatic capsule of a nonhuman animal and rearing the nonhuman animal for less than 4 days, which has not yet  
10 developed prostatitis.

20. A method for evaluating the efficacy of a drug for preventing human nonbacterial prostatitis according to Claim 19, wherein the lower urinary tract disorder is a urine storage disorder posing at least one symptom selected from the group  
15 consisting of pollakiuria, urinary incontinence, and reduced effective bladder capacity.

21. Use of the nonbacterial prostatitis animal model recited in any one of claims 1 to 6 to search for an active ingredient for a pharmaceutical composition for treating human  
20 nonbacterial prostatitis or to evaluate the efficacy of a pharmaceutical agent for treating human nonbacterial prostatitis.

22. Use of a preparatory nonbacterial prostatitis animal model prepared by injecting hydrochloric acid beneath the prostatic capsule, which has not yet developed prostatitis, to  
25 search for an active ingredient for a pharmaceutical composition for preventing human nonbacterial prostatitis or to evaluate the efficacy of a pharmaceutical agent for preventing human nonbacterial prostatitis.

23. The use according to claim 22, wherein the  
30 preparatory nonbacterial prostatitis animal model is a nonhuman animal, and prepared by injecting hydrochloric acid beneath the prostatic capsule of a nonhuman animal and rearing the nonhuman animal for less than 4 days.

24. A pharmaceutical composition for treating or  
35 preventing human nonbacterial prostatitis comprising a substance

evaluated as having an effect for ameliorating or preventing nonbacterial prostatitis by the screening method recited in claims 11 or 14.